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Patent
Attorney Docket No.: 85773-229**REMARKS**5 **A. Rejection of claims 8-9 under 35 U.S.C. 112**

On page 2 of the Office Action, the Examiner has rejected claims 8 and 9 under 35 U.S.C. 112 as having insufficient antecedent basis, specifically with regard to the expression "the figure of merit". The Applicant respectfully submits that the Examiner's
10 rejections have been overcome by way of the present amendment and that claims 8 and 9 are now in full compliance with 35 U.S.C. 112.

15 **B. Rejection of claims 1-4, 7, 9-12, 15-18, 21, 22, 25-29 and 36 under 35 U.S.C. 102 (Khaleghi)**

On page 2 of the Office Action, The Examiner has rejected claims 1-4, 7, 9-12, 15-18, 21, 22, 25-29 and 36 under 35 U.S.C. 102(e) as anticipated by U.S. patent no. 6,040,933 (hereinafter referred to as Khaleghi). The Applicant respectfully traverses this rejection
20 and submits that the claims as filed are in allowable form, as discussed herein below.

25 **CLAIM 1**

The Examiner asserts that Khaleghi's BER and OSNR represent channel-specific and site-specific figures of merit, respectively. Applicant respectfully disagrees and submits
25 that the Examiner has not shown Khaleghi to teach a site-specific figure of merit. Specifically, in reference to EQ.1 at lines 50-55 of col. 4, Khaleghi states that "the BER performance of a channel operating at wavelength λ_i is related to the OSNR of the channel..." (col. 4 lines 47-49, emphasis added). Thus, it is clear that both the BER and OSNR of Khaleghi are channel-specific figures of merit. In contrast, the present
30 invention determines both a channel-specific figure of merit for each channel and a site-specific figure of merit for each site that is a drop site for at least one channel.

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Since the cited art fails to teach or suggest all of the limitations of claim 1, it is respectfully submitted that rejection under 35 USC 102 is improper and the Examiner is respectfully requested to withdraw his rejection of claim 1.

5

CLAIMS 2-25

Claims 2-25 are dependent from claim 1 and as such contain all the limitations present in that claim. Therefore, for the same reasons as those set forth in support of claim 1, the Examiner is respectfully requested to withdraw his rejection of claims 2-25.

10

CLAIM 26

Claim 26 recites (emphasis added):

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"A method [...], comprising:

determining a site-specific figure of merit for each site that is a drop site for at least one channel [...]"

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As already stated in respect of claim 1, the Examiner has not shown the above-emphasized limitation to be taught or suggested by Khaleghi. Since the cited art fails to teach or suggest all of the limitations of claim 26, it is respectfully submitted that rejection under 35 USC 102 is improper and the Examiner is respectfully requested to withdraw his rejection of claim 26.

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CLAIMS 27-35

Claims 27-35 are dependent from claim 26 and as such contain all the limitations present in that claim. Therefore, for the same reasons as those set forth in support of claim 26, the Examiner is respectfully requested to withdraw his rejection of claims 27-35.

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CLAIMS 36-40

Claim 36 recites (emphasis added):

5 "An equalizer [...], comprising:

 means for determining a site-specific figure of merit for each site that is a drop site for at least one channel [...]"

10 Claim 37 recites (emphasis added):

 "Computer-readable media [...], comprising:

 determining a site-specific figure of merit for each site that is a drop site for at least one channel [...]"

Claim 38 recites (emphasis added):

20 "At least one computer [...], comprising:

 determining a site-specific figure of merit for each site that is a drop site for at least one channel [...]"

Claim 39 recites (emphasis added):

25 "A method [...], comprising:

 determining, for each site that is a drop site for at least one channel, a site-specific figure of merit [...]"

Claim 40 recites (emphasis added):

35 "An optical system, comprising:

 [...] determine a site-specific figure of merit for each site that is a drop site for at least one channel [...]"

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As already stated in respect of claim 1, the Examiner has not shown Khaleghi to teach or suggest the above-emphasized limitations. Since the cited art fails to teach or suggest all of the limitations of claims 36-40, it is respectfully submitted that rejection under 35 USC 102 is improper and the Examiner is respectfully requested to withdraw his
5 rejection of claim 36-40.

C. Rejection of claims 1-4, 7, 9-12, 15-18, 21, 22, 25-29 and 36 under 35 U.S.C. 102 (Zhou)

10 On page 4 of the Office Action, The Examiner has rejected claims 1-4, 7, 9-12, 15-18, 21, 22, 25-29 and 36 under 35 U.S.C. 102(e) as anticipated by U.S. patent no. 6,400,479 (hereinafter referred to as Zhou). The Applicant respectfully traverses this rejection and submits that the claims as filed are in allowable form, as discussed herein below.

15 CLAIM 1

The Examiner asserts that the OSNR of Zhou is a site-specific figure of merit. Applicant respectfully disagrees and submits that the Examiner has not shown that Zhou teaches a site-specific figure of merit. Specifically, in column 5, lines 53-57, Zhou teaches the
20 following (emphasis added):

25 "1. Measure the OSNR of the channel at the receiver 18.
2. If OSNR is not within an acceptable tolerance of the desired OSNR, the output power of the transmitter 14 for the new channel is adjusted until the OSNR is within the acceptable tolerance of the desired OSNR."

Thus, it should be apparent that the OSNR of Zhou is a channel-specific figure of merit and, contrary to the Examiner's assertion, is not a "site-specific figure of merit". In addition, in Zhou, the BER "is a function of the optical-signal-to-noise-ratio (OSNR) of the
30 channel" (col. 4 lines 2-3). Hence, it is clear that both the BER and OSNR of Zhou are channel-specific figures of merit. In contrast, the present invention determines both a

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channel-specific figure of merit for each channel and a site-specific figure of merit for each site that is a drop site for at least one channel.

5 Since the cited art fails to teach or suggest all of the limitations of claim 1, it is respectfully submitted that rejection under 35 USC 102 is improper and the Examiner is respectfully requested to withdraw his rejection of claim 1.

CLAIMS 2-25

10 Claims 2-25 are dependent from claim 1 and as such contain all the limitations present in that claim. Therefore, for the same reasons as those set forth in support of claim 1, the Examiner is respectfully requested to withdraw his rejection of claims 2-25.

CLAIM 26

15

Claim 26 recites (emphasis added):

“A method [...], comprising:

20

determining a site-specific figure of merit for each site that is a drop site for at least one channel [...].”

As already stated in respect of claim 1, the above-emphasized limitation is absent from Zhou. Since the cited art fails to teach or suggest all of the limitations of claim 26, it is
25 respectfully submitted that rejection under 35 USC 102 is improper and the Examiner is respectfully requested to withdraw his rejection of claim 26.

CLAIMS 27-35

30 Claims 27-35 are dependent from claim 26 and as such contain all the limitations present in that claim. Therefore, for the same reasons as those set forth in support of claim 26, the Examiner is respectfully requested to withdraw his rejection of claims 27-35.

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CLAIMS 36-40

Claim 36 recites (emphasis added):

5

“An equalizer [...], comprising:

means for determining a site-specific figure of merit for each site that is a drop site for at least one channel [...].”

10

Claim 37 recites (emphasis added):

“Computer-readable media [...], comprising:

determining a site-specific figure of merit for each site that is a drop site for at least one channel [...].”

15

Claim 38 recites (emphasis added):

20

“At least one computer [...], comprising:

determining a site-specific figure of merit for each site that is a drop site for at least one channel [...].”

25

Claim 39 recites (emphasis added):

“A method [...], comprising:

determining, for each site that is a drop site for at least one channel, a site-specific figure of merit [...].”

30

Claim 40 recites (emphasis added):

35

“An optical system, comprising:

[...] determine a site-specific figure of merit for each site that is a drop site for at least one channel [...].”

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As already stated in respect of claim 1, the above-emphasized limitations are absent from Zhou. Since the cited art fails to teach or suggest all of the limitations of claims 36-40, it is respectfully submitted that rejection under 35 USC 102 is improper and the Examiner is respectfully requested to withdraw his rejection of claim 36-40.

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D. Rejection of claims 5, 6, 8, 13-14, 19-20, 23-24 and 37-40 under 35 U.S.C. 103

On page 5 of the Office Action, the Examiner has rejected claims 5, 6, 8, 13-14, 19-20, 23-24 and 37-40 under 35 U.S.C. 103(a) as being unpatentable over Khaleghi U.S. Patent 6,040,933 (hereinafter referred to as Khaleghi) in view of Li et al U.S. 2003/0053163 (hereinafter referred to as Li).

The Examiner's attention is directed to the following:

15 **I. The present application – United States Patent Application Serial No. 09/667,680 to Foo**

- Assignment from all inventors to Nortel Networks Limited – Registered at Reel/Frame 011133/0927, recorded September 22, 2000.

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II. United States Patent 6,040,933 (Application Serial No. 08/994,761) to Li et al.

- Assignment from all inventors to Northern Telecom Limited – Registered at Reel/Frame 9206/0690, recorded June 4, 1998.

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- Change of Name from Northern Telecom to Northern Telecom Limited to Nortel Networks Corporation – Registered at reel/frame 010498/0355, recorded January 6, 2000.

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- Change of Name from Nortel Networks Corporation to Nortel Networks Limited – Registered at reel/frame 011195/0706, recorded August 30, 2000.

5 **III. United States Publication Application 2003-0053163-A1 (Application Serial No. 09/161,433) to Khaleghi et al.**

- Assignment from all inventors to Northern Telecom Limited – Registered at reel/frame 9487/0735, recorded September 24, 1998.
- 10 - Change of Name from Northern Telecom to Northern Telecom Limited to Nortel Networks Corporation – Registered at reel/frame 010498/0355, recorded January 6, 2000.
- 15 - Change of Name from Nortel Networks Corporation to Nortel Networks Limited – Registered at reel/frame 011195/0706, recorded August 30, 2000.

20 It is respectfully submitted that the above-referenced documents establish that Khaleghi and Li were, at the time the present invention was made, owned by the same person or subject to an obligation of assignment to the same person. On these grounds, given that the present application was filed on or after November 29, 1999, the Examiner is respectfully requested to withdraw his rejection of claims 5, 6, 8, 13-14, 19-20, 23-24 and 37-40.

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In view of the foregoing, Applicant is of the view that claims 1-40 are in allowable form. Favourable reconsideration is requested. Early allowance of the Application is earnestly
5 solicited.

If the application is not considered to be in full condition for allowance, for any reason, the Applicant respectfully requests the constructive assistance and suggestions of the Examiner in drafting one or more acceptable claims pursuant to MPEP 707.07(j) or in
10 making constructive suggestions pursuant to MPEP 706.03 so that the application can be placed in allowable condition as soon as possible and without the need for further proceedings.

Respectfully submitted,

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